



The effects of a non-adaptive school-to-work transition on transition to adulthood, time perspective and internalizing and externalizing problems

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Abstract

The 21st-century world of work complexity is considered a health risk factor for young people. Due to the economic crisis, globalization, and challenges of post-industrial society, 28.8% of Italian young people experience the NEET condition. The study aims to understand the psychological factors associated with the NEET status, specifically the self-perception of transition to adulthood, the future time perspective, and the effects on health in terms of internalizing and externalizing problems. To this end, 450 young people (150 students, 150 employees, 150 NEET) were involved. Moreover, the study has also highlighted that socio-demographic characteristics can play a role in the relationship between the NEET status and these outcomes. The results show that the NEET condition is associated with a negative vision about the future, a low self-perception of transition to adulthood, and internalizing and externalizing health problems. Starting from findings, implications regarding intervention models and future research directions are discussed.

Keywords NEET · Young people · Future time perspective · internalizing/externalizing problems · Structural equation models

Introduction

The school-to-work transition (SWT) is a crucial developmental task for young people. After finishing schooling, young people try to establish themselves in the labour market (Schoon & Bynner, 2019). However, making the transition from school to work is becoming extremely

hard. In the life span developmental psychology perspective, the social and economic context in which transitions take place determines the shape and outcomes of youth transitions (Bynner & Parsons, 2002). In this sense, transition experiences are embedded within socio-historical and cultural contexts (Schoon & Lyons-Amos, 2016). In light of this, social change, that is different across countries and reflects differences in education and employment systems, affects SWT in different ways determining different pathways of such transition. Moreover, external shocks, such as an economic recession, could create not linear but diverging destinies of transition (Schoon & Bynner, 2017). Due to nowadays labor market complexity, young people often have great difficulties finding suitable employment. An unstable labor market characterizes this 21st-century with frequent job transitions, economic crisis, globalization, and the challenges of post-industrial society. According to the understanding of the phenomenon proposed by Savickas (2012), the secure employment and stable organizations of the 20th century that offered a secure basis for constructing a life and planning a future have been replaced by the 21st-century scenario, named the dejobbing era. Specifically,

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young people face three main challenges. Firstly, globalization and technological evolution have been a significant societal impact and shaped employment patterns (Makridakis, 2017). Secondly, but related to the first one, the Great Recession from 2008 and the subsequent introduction of austerity measures including labour market reforms to promote flexible employment and reduction of support for students, did bring with it reduced employment opportunities and a labour market increasingly characterized by insecurity (Schoon & Bynner, 2019). Thirdly, the threat to the ecosystem such as the environmental challenges, climate changes, and exponential growth in global populations and consumption, increased inequality of wealth, development of non-decent working conditions (Guichard, 2018), that demand a focus on sustainable development of well-being in individuals and organizations (Magnano et al., 2019; Santilli et al., 2020). In addition, changes from the last years linked to the COVID-19 pandemic have brought new major issues to the world (Fusco et al., 2021; Masenya, 2021). The current global unemployment is connected causally and temporally to the difficulties related to the COVID-19 pandemic (Blustein et al., 2020). As reported by the International Labor Organization (2020), young people represent the most vulnerable group when it comes to the social and economic impact of the virus pandemic and the COVID-19 economic crisis resulting in a major dislocation of young workers from the labor market. Moreover, several studies showed that pandemics affects almost all aspect of life, including psychological issues (Duong, 2022; Rossi et al., 2021). Psychological distress as a consequence of the COVID-19 pandemic has been shown in several studies with university students (Duong, 2021; Duong et al., 2022; Parola et al., 2020; Celia et al., 2022). These health consequences can be also a risk factor for young people making the university to work transition.

Data from EU-28 reported that in 2020 about 15 million young people were neither in employment nor in education and training (NEET). The NEET-rate increases with increasing age (14.9% for the 20–24 age group; 17.1% for 25–29; 17.3% for 30–34) and mainly characterizes the female gender (8.7% points more than men). Specifically, more than one fifth (20.9%) of young women (aged 20–34) in the EU were NEETs, while the corresponding share among young men was 8.7% points lower, at 12.2% (Eurostat, 2020). NEET is a pivotal problem because its implications are two-fold: on a personal level, these individuals are more likely to become disenfranchised and to suffer from poverty and social exclusion; on a social and economic level, they represent a considerable loss in terms of unused productive capacity and a substantial cost in terms of welfare payments. In the EU-28, Italy is one of the most affected by this current situation (Eurostat, 2020). Italy has the highest rate

of NEET among European countries (Eurostat, 2020). The situation appears dramatic specifically in Southern Italy, in which 43.3% of young people in 2020 were unemployed.

Such economic and social transformations, as well as phenomena of globalization, internationalization, and rapid technological progress, have therefore impacted the normative turning point, as in the SWT (Bynner, 2012; Bynner & Parsons, 2002). In Western societies, the SWT has become more prolonged and most young people choose to attend higher education studies to compete in a changing labour market (Settersten et al., 2015) hoping a decent pay and good prospects job (Sironi, 2018). The delay or failure of the SWT determines psychological and vocational fallout. In today's society characterized by insecurity thinking about the future and planning a personal life is not allowed (Fusco et al., 2022; Santilli et al., 2015). The prolonged SWT has important implications for young adults' lives and their access to adulthood (Arnett et al., 2014; Sica et al., 2018). The current idea of adulthood is most associated with self-actualization in education and career and with financial conditions instead of the creation of a new family (Cepa & Furstenberg, 2021). Moreover, several studies on unemployment have documented its effect on mental health (Bartelink et al., 2019; McKee-Ryan et al., 2005; Paul & Moser, 2009). Gariépy and colleagues (2021) have performed the first systematic review and meta-analysis on the association between youth mental health and being NEET showing that the NEET status predicted individual mental health and substance use problems. Furthermore, longitudinal studies suggested that mental health problems predicted becoming NEET later (Esch et al., 2014).

Therefore, the health-related problem of NEET is an emerging topic with important clinical and public health implications. Consistent with the life-span developmental psychology, given the different implications of the Great Recession for young adults' economic standing, this work focus on the psychological implications associated with the NEET status in the Italian context. Specifically, the study explores the effect of a non-adaptive SWT on self-perception of transition to adulthood, the future time perspective, and internalizing and externalizing health problems. Non-adaptive transition refers to a lack of individual-context adaptation, i.e. the failure in the SWT.

Transition to adulthood

Taking on adult roles is one of the main developmental tasks of young people. Challenges to achieving adult status involve commitment and effort, such as setting goals and aspiring to a position, planning and carrying out one's training, to acquire the skills necessary to place oneself in a global economy (Arnett, 2007). The literature emphasizes

that a job is an important marker among the factors that define the transition to adulthood (Arnett, 2000a, b, 2004; Bynner, 2005; Côté, 2000; Hendry & Kloep, 2007, 2010; Settersten et al., 2008). In the 21st century, the difficulties encountered in the transition to the labour market can cause a delay in the transition into adulthood. Studies show that this delay is associated with numerous factors such as the achievement of specific characteristics of independence and interdependence (Kins & Beyers, 2010), the acquisition of higher levels of psychosocial maturity (Galambos et al., 2006), solving developmental tasks related to education, job and intimate relationships (Schulenberg et al., 2004; Zupančič et al., 2014).

In the last few years, literature has been carefully rethinking the very definition of adulthood in the light of post-modernity considering the current SWT difficulties and the economic independence (Arnett, 2004; Arnett et al., 2014; Bynner, 2005; Côté, 2000; Hendry & Kloep, 2007, 2010). The absence of a predetermined path toward adulthood, uncertainty in job prospects, the economic crisis, the shifting cultural contexts, and globalization are interacting in influencing this transition (Tagliabue et al., 2014), providing a growing range of possible pathways to adulthood (Kraus, 2007). Therefore, adulthood criteria have become less structured and more fluid, and subjective (Sica et al., 2018). The trajectories have consequently undergone a transition from normative and homogeneous to individualized and heterogeneous (Aleni Sestito & Sica, 2016; Sica et al., 2016). This scenario requires an active role of young people in their transitions paths construction (Shanahan, 2000) and the deployment of individual resources that support this transition (Côté & Levine, 2002; Luyckx et al., 2008; Schwartz et al., 2005). The delay of the transition to adulthood is confirmed by research carried out in the American context (Arnett, 2004; Reitzle, 2006; Tanner & Arnett, 2009) and the European and Italian contexts (Aleni Sestito et al., 2015; Carrà et al., 2014; Crocetti et al., 2012; Livi Bacci, 2008; Piumatti et al., 2014).

Time perspective

Young people are currently thinking of their future in a continuously changing context, where the linearity of professional trajectories is no anymore useful for future planning. According to Zimbardo and Boyd (1999), time perspective (TP) is a basic process in the individual's functioning in relationship with society. Specifically, TP is a set of time frames that assign order and meaning to the events and form expectations, goals, and hypothetical scenarios. The Future dimension reflects an orientation toward targets and goals and planning strategies to achieve them.

The literature shows that the time perspective is strongly associated with well-being (Zhang & Howell, 2011; Cunningham et al., 2015; Hall et al., 2015). The future dimension is a powerful risk (Rothspan & Read, 1996; Keough et al., 1999; Petry et al., 1998; Wills et al., 2001) and an effective protective factor (Keough et al., 1999). Specifically, a positive vision about the future would allow for a greater ability to assess the long-term consequences of the behavior (Zambianchi et al., 2010). Furthermore, TP is a powerful mediator between socioeconomic status and health (Singh-Manoux & Marmot, 2005; Guthrie et al., 2009). The higher socioeconomic status is most likely associated with a future-oriented TP (Corral-Verdugo et al., 2006; D'Alessio et al., 2003; Epel et al., 1999; Lamm et al., 1976). A future-oriented TP seems to be typical of subjects with a high education level and more present in the employed (Guthrie et al., 2009).

Psychological health

Unemployment at a young age can affect psychological health at different levels. Several reviews and meta-analyses collect the effects of unemployment on psychological health (Bartelink et al., 2019; Fryer & Payne, 1986; Hammarström, 1994; McKee-Ryan et al., 2005; Murphy & Athanasou, 1999; Parola & Donsi, 2018; Paul & Moser, 2009). Literature shows that the NEET status is associated with risk behaviors, such as poor physical health (Brydsten et al., 2015; Nardi et al., 2013; Nygren et al., 2015), increased smoking (Barnes & Smith, 2009; Hagquist & Starrin 1996), increased alcohol or substances consumption (Compton et al., 2014; Fergusson et al., 2001; Hagquist & Starrin, 1996), with cardiovascular consequences (Herbig et al., 2013) and increased risk of cancer (Parkin et al., 2011; Stewart et al., 2017). Alongside this, some research has also traced correlations between youth unemployment and crime (Atkinson & Hills, 1997; Henderson et al., 2017).

Specifically in mental health, youth unemployment is associated with distress (Bjarnason & Sigurdardottir, 2003; Stea et al., 2019), psychosomatic symptoms (Axelsson & Ejlertsson, 2002), increased risk of depression (Crowe & Butterworth, 2016; Bartelink et al., 2019), anxiety (Virtanen et al., 2016; Bartelink et al., 2019), and other psychiatric disorders (Power et al., 2015). Some research has also shown some negative effects of youth unemployment on long-term health: some somatic (Brydsten et al., 2015) and more generally psychological ones (Hammarström & Janlert, 2002; Strandh et al., 2014) in adulthood are reported as consequences of youth unemployment.

Few studies focus on analyzing the role of socio-demographic variables in the health and unemployment relationship. Among these, gender and long-term or short-term

unemployment are believed to be significant moderators of the unemployment influence (Hammarström, 1994; Paul & Moser, 2009). Compared to gender, Paul and Moser (2009) highlight that probably unemployed males suffer more than females or feel better when they have a job. Moreover, the negative effects of unemployment on mental health were larger among long-term unemployed than short-term unemployed. Likewise, employment is beneficial to health, especially for mental health and against depression (van der Noordt et al., 2014).

Proposed conceptual model and hypotheses

The first aim of this study was to examine the effect of the NEET condition on individuals' self-perception of transition to adulthood, future time perspective, and internalizing and externalizing health problems. Based on the above literature review, six hypotheses are proposed:

H1: Employment condition (0 = Non-NEET, 1 = NEET) is negatively related to future time perspective.

H2: Employment condition (0 = Non-NEET, 1 = NEET) is negatively related to a self-perception of the transition to adulthood.

H3: Future time perspective is positively related to a self-perception of the transition to adulthood.

H4: Employment condition (0 = Non-NEET, 1 = NEET) is positively related to internalizing and externalizing health problems.

H5: Future time perspective is negatively related to internalizing and externalizing health problems.

H6: Self-perception of the transition to adulthood is negatively related to internalizing and externalizing health problems.

The second aim was to understand whether specifically socio-demographic characteristics can play a crucial role in the relationship between the NEET condition and psychological outcomes. Specifically, the study considered only a NEET subsample and the related individual characteristics, i.e., age, gender, educational level, educational level of parents, the profession of parents, and specific characteristics of the unemployment condition, i.e., looking for their first job and time of employment. Based on the above literature review, six hypotheses are proposed:

H7: Sex (0 = male, 1 = female) is negatively related to internalizing and externalizing health problems.

H8: Age is positively related to self-perception of the transition to adulthood.

H9: Age is positively related to internalizing and externalizing health problems.

H10: Time of unemployment is positively related to self-perception of the transition to adulthood.

H11: Time of unemployment is positively related to internalizing and externalizing health problems.

No other hypotheses were formulated. Specifically, no hypothesis was formulated for the relationship between sex and age to future time perspective, for the relationship between sex and self-perception of the transition to adulthood, between educational level, parents' educational level and professions of parents and outcomes variables. Moreover, no hypothesis was formulated on the difference between looking for the first job or having been previously employed because not yet been explored in previous studies.

Methods

Participants and procedure

450 young people aged 25–34 ($M_{age} = 29.1$, $SD_{age} = 3.12$) took part in this study. This total sample included 150 students, 75 males and 75 females ($M_{age} = 27.1$, $SD_{age} = 2.49$), 150 employees, 75 males and 75 females ($M_{age} = 30.7$, $SD_{age} = 2.85$), and 150 NEET, 75 males and 75 females ($M_{age} = 29.5$, $SD_{age} = 2.91$). Following the recommendation of ILO (2012) and Eurofound (2012), young adults who were not studying nor working for at least four weeks from the survey have been categorized as NEET. Data collection was carried out in the Campania Region, in Southern Italy.

The sample size required to conduct this study was determined a priori by considering the statistical analyses used in this study (see [Data Analysis](#) section). Following the criteria provided by Tabachnick and Fidell (2014) and adapted by Rossi and colleagues (2020), the formula takes into account the highest possible number of paths within the structural model equation and the number of groups. The convenient sampling method was utilized in the present study. The participants were recruited through the network with the associations of the Campania context. Data collection was carried out through an online survey. The administration of the questionnaires ended when the estimated quotas of sample size previously determined were reached. In this regard, the ASR questionnaire provides for the possibility of online administration (see Manual for the ASEBA Adult Form & Profile, Achenbach & Rescorla, 2003).

Before the data collection process, the study was approved by the Ethical Committee of Psychological Research of the University of Naples Federico II to ensure the protection of participants. Moreover, the study was carried out in accordance with the American Psychological Association. The purpose of the informed consent form was to provide confidentiality and anonymity for the study participants.

Measures

Short-Form Time Perspective Inventory (S-ZTPI) The Future scale of the short version of the ZTPI Italian questionnaire (D'Alessio et al., 2003) was used to assess a future time perspective. The Future scale consists of 9-items (e.g. "I believe that my future is beautiful and well planned"). Respondents indicated how characteristic a particular statement was of them on a five-point Likert Scale (very untrue, somewhat untrue, neutral, somewhat true, and very true, coded 1–5 such that higher values indicated a stronger endorsement). Cronbach's alpha in this study was 0.80.

Self-Perception of Adulthood The single-item scale developed and tested in the Italian context (Donsi et al., 2002) was used to assess the young people's perception of the transition to adulthood. Young people are asked to think about their transition from adolescence to adulthood and to position themselves by indicating a score on a scale from 1 (= adolescence) to 7 (= adulthood).

Adult Self Report 18–59 (ASR) The Syndromic Scales of Adult Self Report 18–59 (Achenbach & Rescorla, 2003) were used to assess the internalizing and externalizing problems. Specifically for this study, Anxious/Depressed (AD, 18-items, e.g. "I am too fearful or anxious"); Withdrawn (Wi, 8-items, e.g. "I don't get along with other people"); Aggressive Behavior (AB, 15-items, e.g. "I blame others for my problems"); Rule-Breaking Behavior (RB, 14-items, e.g. "I am impulsive or act without thinking") were administered. Anxious/Depressed and Withdrawn refer to Internalizing problems and reflect internal distress. Aggressive Behavior and Rule-Breaking Behavior refer to Externalizing problems and reflect conflicts with other people. Respondents indicated how characteristic a particular statement was of them over the past six months on a three-point scale (not true, somewhat or sometimes true, very true or often true, coded 0–2). The Cronbach's alpha of AD, Wi, AB and RB was 0.93, 0.88, 0.89, 0.72, respectively.

Socio-demographic Information The questionnaire collected socio-demographic information useful to detect the heterogeneity of the NEET condition. The first part of the booklet, common to the total sample, involved the collection of information about age, sex, educational level, educational level of parents, and profession of parents. Educational levels and professions were evaluated considering the H-ISCED and H-ISCO indices. The h-ISCED index refers to the international standard classification of education. The index was created by taking the highest education level among the parents [range 1–5]. H-ISCO index refers to the international standard classification of occupations.

The index was created by taking the highest employment classification between the parents [range 1–9]. The second part of the booklet was administered only to NEET respondents, i.e. unemployed for at least four weeks. In this section, NEETs were also asked whether they were looking for their first job and whether they had previously worked and when (during education/training or after leaving education/training), how many months they had been in this condition, and whether they were looking for a job.

Data analysis

First, means, standard deviations, and correlations between the variables were computed on the global sample. Then, before modeling, distinct correlations were calculated for students and employees to create a single comparison group (Non-NEET) with the category NEET. The significance of the difference between the two correlation coefficients was tested by converting each coefficient into a z-score using Fisher's r-to-z transformation and then, making use of the sample size employed to obtain each coefficient, z-scores were compared using formula 2.8.5 from Cohen and Cohen (1983; Eid et al., 2011). Analyses of variance (ANOVAs) were also run to verify whether group differences would emerge in future time perspective (FTP), the transition to adulthood (TA), and internalizing and externalizing problems. Post-hoc comparisons with Fisher's least significant difference (LSD) were then calculated for the variables that showed significant differences.

Path analysis is a type of structural equation model (SEM). In order to answer the first research question and assess our hypotheses, a path model was tested on the total sample. Specifically, the NEET/Non-NEET variable (0 = Non-NEET; 1 = NEET) was set as a direct predictor of all the variables FTP, TA, AD, Wi, AB, and RB. Moreover, FTP and TA were set as mediators between the NEET/Non-NEET variable and the model outcomes. According to the literature, a model is considered to have a satisfactory fit if the GFI, TLI, and CFI values are approximately 0.90 or above (Medsker et al., 1994) and if the RMSEA is about 0.08 or less (Byrne, 2010). SEM models were run in IBM SPSS AMOS 21.0 by using the maximum likelihood (ML) estimation.

To answer the second research question, a path model was tested for the NEET sample. Specifically, the effect of age, gender, educational level, H-ISCO, H-ISCED, time of unemployment, and looking for the first job, on FTP, TA, AD, Wi, AB, and RB was tested. Variables were coded as follow: Age (0 = 25–29, 1 = 30–34), Sex (0 = male, 1 = female), Looking for the First Job (0 = yes, 1 = no); and Time of Unemployment (0 = short-term NEET, 1 = long-term

Table 1 Means and standard deviations for the students, employees, NEETs, and the total sample

	Students	Employees	NEET	Total
Future Time Perspective	30.33 (5.10)	32.57 (4.36)	28.53 (8.13)	30.48 (6.29)
Transition to Adulthood	4.90 (1.16)	5.65 (0.98)	4.61 (1.58)	5.05 (1.33)
Anxious/Depressed	13.13 (6.86)	9.60 (6.53)	18.41 (9.97)	13.72 (8.71)
Withdrawn	4.39 (3.25)	3.37 (3.05)	6.71 (5.35)	4.83 (4.25)
Aggressive Behavior	7.62 (5.36)	5.97 (4.76)	10.17 (7.43)	7.92 (6.20)
Rules Breaking Behavior	2.62 (3.13)	2.52 (2.43)	3.95 (3.18)	3.18 (3.33)

Table 2 Cronbach's alpha and correlations in the total sample (n=450)

	alpha	1	2	3	4	5	6
1. Future Time Perspective	0.80	-					
2. Transition to Adulthood	-	-0.56***	-				
3. Anxious/Depressed	0.93	-0.54***	-0.50***	-			
4. Withdrawn	0.88	-0.60***	-0.50***	0.79***	-		
5. Aggressive Behavior	0.89	-0.51***	-0.49***	0.82***	0.73***	-	
6. Rules Breaking Behavior	0.72	-0.33***	-0.25***	0.44***	0.46***	0.56***	-

*** $p < .001$ **Table 3** Correlations for the students and the employees sub-samples

	1	2	3	4	5	6
1. Future Time Perspective	-	0.29***	-0.16*	-0.26**	-0.14	-0.37***
2. Transition to Adulthood	0.31***	-	-0.15	0.04	-0.17*	-0.20*
3. Anxious/Depressed	-0.14	-0.20*	-	0.59**	0.69***	0.29***
4. Withdrawn	-0.32***	-0.34***	0.54***	-	0.42**	0.33***
5. Aggressive Behavior	-0.21*	-0.29***	0.68***	0.55***	-	0.52***
6. Rules Breaking Behavior	-0.33***	-0.29***	0.36***	0.37***	0.54***	-

* $p < .05$, ** $p < .01$, *** $p < .001$

NEET). Path model involves testing a theoretically determined specific pattern of relationship among a set of variables. The path model was fully saturated.

Results

Preliminary analysis

Means and standard deviation are reported in Table 1. Correlations were computed (see Table 2) to describe associations between future time perspective variables, the transition to adulthood, and internalizing and externalizing problems. The strongest correlations emerged between AD and Wi ($r = .79$), AD and AB ($r = .82$), and Wi and AB ($r = .73$), showing a strong association between internalized problems, such as anxiety or depressive thoughts, and externalized behavior. FTP was significantly and negatively correlated with TA ($r = -.56$), AD ($r = -.54$), Wi ($r = -.60$), and AB ($r = -.51$). TA was significantly and negatively correlated with AD ($r = -.50$), Wi ($r = -.50$), and AB ($r = -.49$). A weak relationship emerged between FTP and RB ($r = -.33$) and between TA and RB ($r = -.25$).

When calculating distinct correlations for students and employees (Table 3) the only difference found was related to the associations of TA and Wi [$Z = 2.294$, $p = .004$]. The correlation between TA and Wi was significant only in the students' group ($r = -.34$). For the other dimensions, differences were not found: FTP and TA [$Z = 0.271$, $p = .414$]; FTP and AD [$Z = 0.149$, $p = .441$]; FTP and Wi [$Z = -0.478$, $p = .316$]; FTP and AB [$Z = 0.549$, $p = .292$]; FTP and RB [$Z = 0.419$, $p = .337$]; TA and AD [$Z = -0.434$, $p = .332$]; TA and Wi [$Z = 2.294$, $p = .004$]; TA and AB [$Z = -1.071$, $p = .142$]; TA and RB [$Z = -.795$, $p = .213$]; AD and Wi [$Z = -0.682$, $p = .248$]; AD and AB [$Z = -0.292$, $p = .385$]; AD and RB [$Z = 0.65$, $p = .258$]; Wi and AB [$Z = -0.552$, $p = .06$]; Wi and RB [$Z = 0.429$, $p = .334$]; AB and RB [$Z = 0.249$, $p = .402$], thus permitting the creation of a single Non-NEET group.

Analyses of variance revealed a significant group (NEET and Non-NEET) effect on all variables, FTP [$F(1,448) = 22.489$, $p = .000$, $\eta^2 = 0.048$], TA [$F(1,448) = 25.842$, $p = .000$, $\eta^2 = 0.055$], AD [$F(1,448) = 76.372$, $p = .000$, $\eta^2 = 0.146$], Wi [$F(1,448) = 49.059$, $p = .000$, $\eta^2 = 0.099$], AB [$F(1,448) = 31.796$, $p = .000$, $\eta^2 = 0.066$], and RB [$F(1,448) = 31.693$, $p = .000$, $\eta^2 = 0.066$], with NEETs experiencing greater difficulties in feeling adult, a lack of future

Table 4 Means and standard deviations for Non-NEET and NEET groups and for the global sample

	Non-NEET	NEET	Total
Future Time Perspective	31.45 (4.86)	28.53 (8.13)	30.48 (6.29)
Transition to Adulthood	5.27 (1.14)	4.61 (1.58)	5.05 (1.33)
Anxious/Depressed	11.37 (6.92)	18.41 (9.97)	13.72 (8.71)
Withdrawn	3.88 (3.19)	6.71 (5.35)	4.83 (4.25)
Aggressive Behavior	6.80 (5.13)	10.17 (7.43)	7.92 (6.20)
Rules Breaking Behavior	2.57 (2.80)	3.95 (3.18)	3.18 (3.33)

orientation, and greater anxiety, depression, social withdrawal problems and aggressive and rule-breaking behavior problems (Table 4).

Structural models

First, the SEM model tested on the global sample provided a good fit for the data, $\chi^2(21)=166.26$, CFI=0.999, NFI=0.999, TLI=0.988, RMSEA=0.046. The results (Fig. 1) showed an effect of the NEET condition on FTP ($\beta=-0.22$, $p=.000$), TA ($\beta=-0.12$, $p=.003$), AD ($\beta=0.25$, $p=.000$), Wi ($\beta=0.17$, $p=.000$), AB ($\beta=0.12$, $p=.002$),

and RB ($\beta=0.19$, $p=.000$). Moreover, FTP had an effect on TA ($\beta=-0.53$, $p=.000$), AD ($\beta=-0.36$, $p=.000$), Wi ($\beta=-0.45$, $p=.000$), AB ($\beta=-0.34$, $p=.000$), and RB ($\beta=-0.28$, $p=.000$). Finally, TA influenced AD ($\beta=-0.23$, $p=.000$), Wi ($\beta=-0.20$, $p=.000$), and RB ($\beta=-0.26$, $p=.000$).

Second, the path model tested on the NEET subsample (Fig. 2) showed significant relationships between TA and, respectively, educational level ($\beta=0.17$, $p=.030$), H-ISCED ($\beta=-0.15$, $p=.011$) and H-ISCO ($\beta=-0.26$, $p=.000$), indicating that a high educational level was linked to a greater self-perception of adulthood, while the high educational level of parents and high H-ISCO index of parents professions was linked to a lower self-perception of adulthood. A significant path emerged between FTP and, respectively, age ($\beta=-0.21$, $p=.002$), sex ($\beta=0.19$, $p=.003$), time of unemployment ($\beta=0.22$, $p=.007$), looking for the first job ($\beta=0.22$, $p=.001$) and H-ISCO ($\beta=0.26$, $p=.000$), meaning that older NEET and males perceive the future as more negative. Furthermore, the future’s negative vision was linked to having previously experienced an employment condition, being a long-term NEET, and a higher professional index of the parents. For the internalizing dimensions, AD was associated with gender ($\beta=-0.31$, $p=.000$), time of unemployment ($\beta=0.45$, $p=.000$), looking for the first job ($\beta=0.15$, $p=.027$), and H-ISCO ($\beta=0.25$, $p=.000$). Wi was

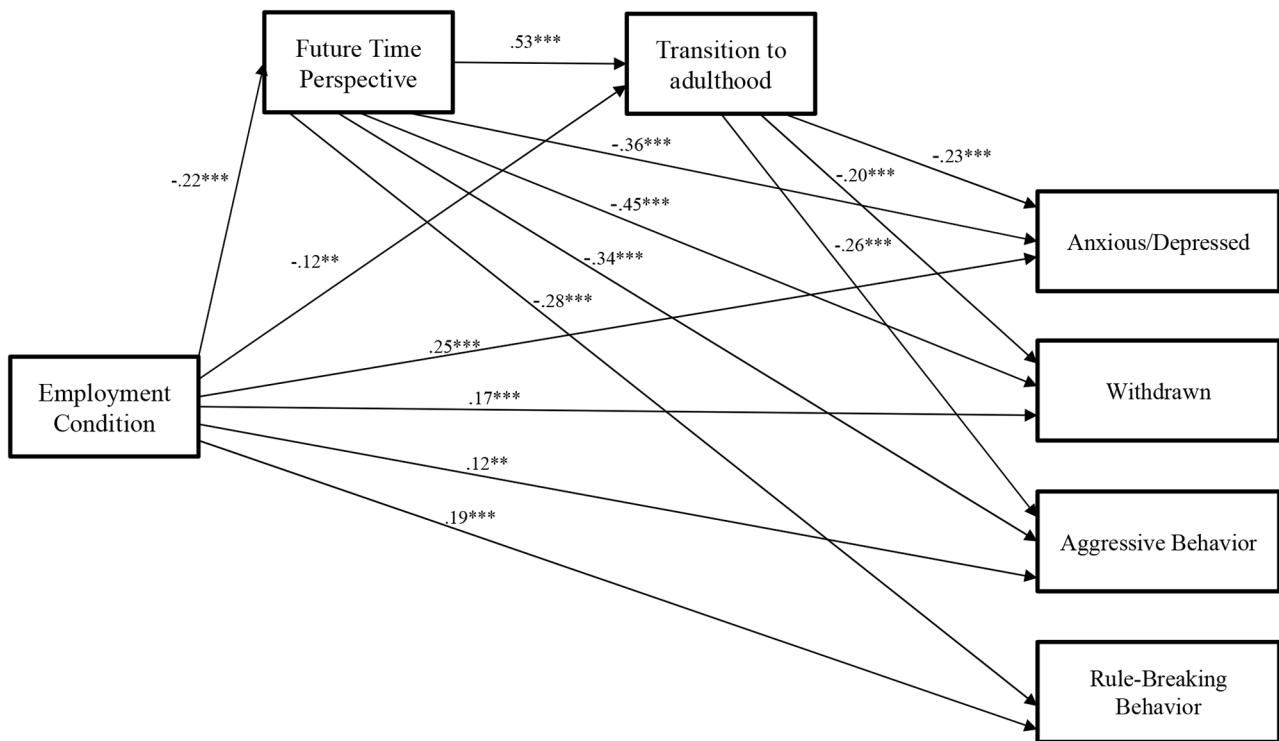


Fig. 1 Path model tested on the global sample (n=450). (Note. FTP=Future Time Perspective; TA=Transition to Adulthood; AD=Anxious/Depressed; Wi=Withdrawn; AB=Aggressive Behavior; RB=Rules Breaking. The NEET variable has been coded as 0=Non-NEET and 1=NEET. Standardized coefficients are showed in the figure. * $p < .05$, ** $p < .01$, *** $p < .001$)

uncertainty of job perspectives (Tagliabue et al., 2014). The transition of Italian people towards adulthood boasts some peculiarities (Crocetti et al., 2012, 2015; Tagliabue et al., 2016). The sub-protective regime, as a type of youth transition model that characterized the Italian context, consists of an existential situation typical of south European young people where they can count on low job security and are substantially family-dependent (Walther, 2006). This regime is characterized by a lack of choice and lack of flexibility. In the absence of a job that provides economic independence, young people remain tied to family support, which seems to be the only possible maintenance income but which blocks family leave, which in turn is necessary for the transition to adulthood. In line with this, the sub-protective regimes show the highest NEET and are typified by the more recent entry of females into the job market (Jongbloed & Giret, 2022).

The results showed also a strong relationship between the transition to adulthood and the future time perspective (H3). The longest way to adulthood can weaken the connection between the way young people live their current situation and the way they plan their future as adults. In line with the literature and the hypothesis of the study, delays in transition undermine the future planning of young people (Biggart & Walther, 2006; Billari & Liefbroer, 2010; Tagliabue et al., 2016).

Related to the health dimensions, taking the theoretical framework proposed by Achenbach and Rescorla (2003), employment condition was associated with internalizing problems, i.e. anxiety, depression, and withdrawal, and externalizing problems, i.e. aggressive and transgressive behaviors. In line with the hypotheses (H4), The NEET status impacts the perception of one's health. These findings are consistent with the literature that link the NEET condition to health problems, such as anxiety and depression (Bartelink et al., 2019; Crowe & Butterworth, 2016; Virtanen et al., 2016), retreat (Varnum & Kwon, 2016), aggressive behavior, transgressive behavior, and crime (Atkinson & Hills, 1997; Henderson et al., 2017; Varnum & Kwon, 2016; Stea et al., 2019).

Future time perspective is linked to internalizing and externalizing health problems (H5). Specifically, a pessimistic vision of the future is associated with internalizing problems such as anxiety, depression, withdrawal, and aggressive and transgressive behavior. These findings are in line with the literature that argues that the temporal framing of life has inevitable implications for health and behavioral self-regulation (Gellert et al., 2012). Kooij and colleagues in a recent systematic review and meta-analysis (2018) provides empirical support for the view that an individual's perception of the future is consistently related to well-being and behaviors.

Finally, self-perception of the transition to adulthood is related to anxiety, depression, withdrawal, and aggressive behavior (H6). The recent literature suggested that the rates of depression and anxiety are high during the transition to adulthood, specifically in the current generation of young adults (Twenge, 2000). Culatta and Clay-Warner (2021) argued that the high rates of psychological distress may be related to the young adults' failure to meet expectations for adulthood. In this sense, could be interesting to study the expectations for adulthood to more understand the related psychological distress shown in the results.

The second aim of the study was to examine the role of socio-demographic variables and specific information related to the unemployment condition. To do this, data analyzes were conducted on the NEET subsample by examining the role of age, gender, educational level, educational level of parents, the profession of parents, looking for the first job and duration of unemployment on outcomes variables. As well known, consistent with the NEET rate indicator the NEET group is characterized by high heterogeneity because the indicator groups together with young people with very different conditions (Eurofound, 2012).

In line with H7, the female sex seems to be a protective factor regarding the future time perspective and psychological health, i.e., females appear more future-oriented and healthy than males. Studies on the gender-based pattern in the link between mental health problems and being NEET are controversial. Paul and Moser (2009) highlighted that probably unemployed males suffer more than females, while Bynner and Parsons (2002) found that for males being NEET impacted their job prospects while for females it affected their psychological well-being.

The hypotheses of the relationship between age and self-perception of the transition to adulthood and health outcomes (H8 and H9) were not corroborated. Age, in fact, was negatively related only to the future time perspective. The lack of association between chronological age and self-perception in transition to adulthood seems to strengthen the self-perceptions of adult status. More than age, the educational level and family cultural capital play an important role. The highest educational level and the highest classification of occupation among the parents lead NEET to still feel far from being adults. Both relationships can be explained in identity terms. If the first relationship is related to self-perception compared to his/her development, having a high family cultural capital leads to feeling even more distant from transition to adulthood. In this case, there are two aspects to consider: on the one hand, a comparison with parenting figures, as employed adults, while on the other, the dependence/independence link from the parents, which slows down the process of independence itself (Arnett et al., 2014; Tagliabue et al., 2016). Moreover, not in line with

H10 and H11, also the time of unemployment was not associated with self-perception of adulthood.

The vision of the future is predicted instead by age, more negatively in NEET of older age, and by the characteristics of the NEET condition itself, both for the duration of unemployment (long-term unemployment) and in the case in which in the past they have experienced the condition of employment. Possible risk factors are comparing the parents' professions and aspects related to the NEET condition, such as duration of unemployment and having experienced the employment condition in the past. Both results are in line with the psychological literature that showed how the cyclical "insider-outsider" labor market is, even more, a risk factor for the onset of health-related problems (Callea, 2010; De Cuyper et al., 2008). Indeed, Paul and Moser (2014) showed that the duration of unemployment, and also gender, are powerful moderators of the relationship between the NEET condition and mental health.

From a theoretical perspective, this study explores a recent topical issue about the effects of employment conditions on psychological outcomes in the Italian context. The results contribute to enriching the understating of the impact of non-adaptive SWTs confirming that the NEET condition led to developmental outcomes, such as the transition to adulthood, health outcomes, such as internalizing and externalizing problems and the future vision, which is, in turn, most related to psychological distress. Socio-demographic variables can be a protective or risk factors in psychological outcomes. For example, the condition related to unemployment, i.e. insider-outsider labor market, could be a risk factor for mental health. Moreover, the experience of internalizing and externalizing health problems at a young age could lead to even more severe effects on mental health in the long term. For example, some authors have pointed out that the NEET condition produces a real scar (Knabe & Rätzel, 2011). A recent longitudinal study on the Italian NEET condition (Bonanomi & Rosina, 2020) has shown that remaining stalled in the NEET condition has significant health effects and extinguishes future planning capacity.

From a practical perspective, this research sheds light on the health problems related to the NEET condition in the Italian context. Specifically, the study considers the sub-group of Southern Italy that reported the highest rate of NEET in the age group considered. This study has three main implications. Firstly, the evidence of the strong relationship between NEET condition and mental health highlights the importance of youth-focused services. Interventions should be helped to cope with labor market challenges considering the different pathways of SWT, such as individuals that encounter problematic transitions or remain excluded from the labour market, insider-outsider labor market, and precariousness workers (Schoon & Lyons-Amos, 2016). It is

important to capture the specific experience of failure in SWT and consider the psychological distress related to it. Moreover, given that several studies highlighted a bidirectional relationship between NEET status and mental health, it also needs that mental health services integrate employment supports to address also vocational needs (Gariépy et al., 2021). Secondly, the findings recommend the need for preventive measures to be implemented before the SWT occurs (Parola & Marcionetti, 2021). In this sense, Life Design (LD) appears as a useful approach to mastering career transition (Hartung, 2019). LD intervention promotes the freedom of the individual to choose her/his career and decide her/his positioning in the world. In a challenging context with a stagnating economy like Italy, interventions as career guidance actions may also include activities that stimulate creative thinking related to the desire for the creation of the environment young people would like to live in (Fusco et al., 2021). Moreover, it is important to highlight the role of career guidance in school. Educational systems need to help young people to think about career pathways (De Vos et al., 2020; Parola et al., 2022). Thirdly, urgent measures at the government level must be realized to support the SWT. The careful examination of transition regimes proposed by Schoon and Bynner (2019) highlighted that the SWT seems to be faster in countries characterized by strong institutional linkages between education and the labour market and strong institutional networks that can support the transition.

Limitations and future research

Even though this study provides significant outcomes, several limitations must be acknowledged. The cross-sectional nature of the study does not allow for establishing a causal relationship between the variables. Longitudinal studies would be desirable to understand the direction of the effects and to test if, for example, the dimensions of development and health are not an effect but the cause of the unemployment condition. However, it should be considered that a large literature has long dealt with the causal relationship between unemployment and health and has shown that unemployment is the cause of distress (McKee-Ryan et al., 2005; Murphy & Athanasou, 1999; Paul & Moser, 2009). Or again, specifically about the dimension of the future, it would be interesting to investigate other dimensions that are connected to future orientation, such as hope, optimism, and life satisfaction. These dimensions could even better outline suggestions for intervention models for young NEETs.

Conclusion

In conclusion, the research highlights how a non-adaptive transition to the labour market turns out to be a condition of risk for young people who are embarking on the process of constructing their careers, and more generally life plans, in the challenging world. The present study is country-specific because it refers to the Italian context. As pointed out, historical and cultural systems provide the blueprint for transition regimes which regulate opportunities for employment (Schoon & Bynner, 2019) and must be taken into account to understand the specific environmental challenges. The findings of this study suggest the importance of defining models of counseling interventions that can support young people in the career construction process, considering the dynamics of the context in which young people are inserted and aiming to open that time horizon that appears limited.

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Data availability The datasets of the current study are available from the corresponding author on reasonable request.

Declarations

Conflicts of interest/competing interests The authors have no conflicts of interest to declare that are relevant to the content of this article.

Ethical approval This study was performed in line with the principles of the Declaration of Helsinki. The questionnaire and methodology for this study was approved by the Human Research Ethics committee of the University of Naples Federico II (Ethics approval number: 4/2019).

Consent to participate/publish Informed consent was obtained from all individual participants included in the study.

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